

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



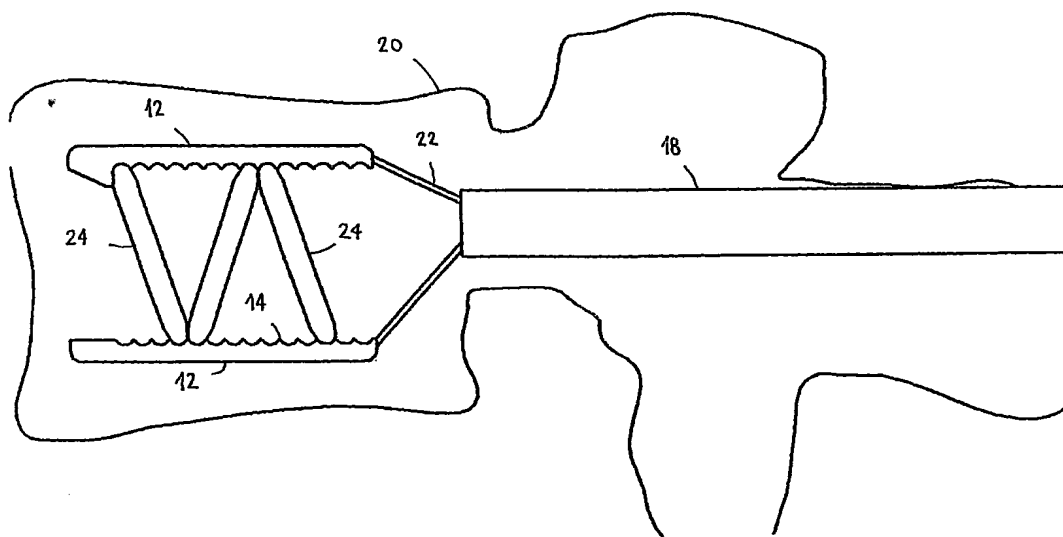
(43) International Publication Date  
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number  
**WO 2004/086934 A2**

- (51) International Patent Classification<sup>7</sup>: **A61B**
- (21) International Application Number: PCT/IL2004/000171
- (22) International Filing Date: 22 February 2004 (22.02.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
155146 30 March 2003 (30.03.2003) IL
- (71) Applicant (for all designated States except US): **EXPANDIS LTD.** [IL/IL]; P.O.B. 15054, 31905 Haifa (IL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SHEZIFI**, Yuval [IL/IL]; 6 Bnei-Brith St., 34752 Haifa (IL). **GRUNBERG**, Ilan [IL/IL]; 15 Geula St., 33198 Haifa (IL). **OHANA**, Nissim [IL/IL]; 201 Ahuza St., 43557 Raanana (IL). **BEN-ARYE**, Asaf [IL/IL]; Yefe Nof St. 30, 30900 Zichron Yaakov (IL).
- (74) Agent: **MILLER - SIERADZKI ADVOCATES & PATENT ATTORNEYS**; P.O.Box 6145, 31061 Haifa (IL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MINIMALLY INVASIVE DISTRACTION DEVICE AND METHOD



(57) Abstract: A device (10) for distracting and supporting two substantially opposing tissue surfaces in a patient's body, to be introduced within the tissue surfaces in a minimally invasive procedure. The device comprises: a wrapping element (12); and an expandable structure (24) insertable between the two substantially opposing support surfaces of the wrapping element, adapted to be expanded between the two substantially opposing surfaces to a predetermined dimension.